

FOR FIRST RESPONDERS

In the event of a suspected natural gas emergency:

- **Isolate the area** and restrict entry to trained emergency response personnel and designated pipeline company employees. Evacuate everyone in the danger area to an upwind location.
- **Administer first aid and medical treatment if needed.**
- **Establish isolation zones.** Based on the type of incident, use any or all of the following, where practical, to establish restricted/evacuation zones: measurements from combustible gas detectors, heat intensity levels from ignited gas, and information from company emergency response personnel. Gas odor—or lack of gas odor—is not sufficient to establish safe zones. Do not approach with vehicles or equipment until the restricted/evacuation zones have been identified.
- **Avoid creating sparks.** Potential ignition sources of natural gas include electrical motors, firearms, vehicles, telephones, static electricity, open flames, or sparks. Park all emergency vehicles at a safe distance beyond the isolation zone. Do not light a match, start an engine, use a telephone, switch lights on or off, or do anything that may create a spark.
- **Immediately make the pipeline operator aware of the situation.** Check posted right-of-way or station signs to find out what company operates the pipeline and how to contact the operator.
- **Let escaping gas burn if it is on fire.** Do not attempt to extinguish a natural gas fire. Attempting to extinguish a natural gas fire may result in a secondary explosion. If necessary, provide cooling for nearby structures that are threatened by the fire.
- **Let pipeline company employees operate the valves to isolate and cut off the fuel supply.** Do not operate the valves yourself. Improper operation by non-pipeline company personnel can intensify the situation.
- **Avoid forced ventilation of structures and excavations.** Forced ventilation can actually increase the possibility of a flammable atmosphere

Properties of Natural Gas

- **Lighter than Air** – 40 percent lighter than air.
- **Composition** – Mostly methane and small amounts of ethane.
- **Hazardous Material** – due to its flammability.
- **Flammable** – Approximately 5 -15 percent gas-to-air mix is the flammable range.
- **Odorless** – Natural gas is odorless in its natural state. The smell of rotten egg often associated with natural gas is normally due to an odorant that is added in some pipelines and distribution systems.
- **Combustion Products** – No significant harmful compounds result from natural gas combustion. However, incomplete combustion may produce carbon monoxide.
- **Ignition Temperature** – The ignition temperature is nearly 1200 degrees Fahrenheit. Static electricity, pilot lights, matches, and sparks from telephones, electric motors and internal combustion engines can easily reach this temperature.
- **Asphixiant** – Natural gas can displace oxygen in an enclosed space, resulting in the potential for suffocation.
- **Non-Toxic**